Reply to Office Action Made Final of March 30, 2006

Atty. Docket No. 277/006

AMENDMENTS TO THE DRAWINGS

Attached hereto is a Replacement Drawing Sheet, including original FIGS. 4J and 4L and amended FIG. 4K. FIG. 4K is amended such that reference term 108 correctly points to the metal film shown therein. Entry of the Replacement Drawing Sheet is respectfully requested.

REMARKS

Prior to entry of this amendment, claims 1 and 17-31 are pending in the subject application.

By this amendment, FIG. 4K and claims 1 and 17-31 are amended. No new matter is added. Claim 1 is the sole independent claim. Entry and consideration of claims 1 and 17-31 are respectfully requested.

Applicants appreciate the Examiner's acceptance of the drawings filed on July 30, 2003.

A. Introduction

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 17-31 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement; rejected claims 17-31 under 35 U.S.C. §112, second paragraph; rejected claims 1 and 17-24 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,690,164 to Fedeli et al (hereinafter "the Fedeli et al. reference"), U.S. Patent No. 6,251,834 to Glowacki et al. ("the Glowacki et al. reference") and U.S. Patent Publication No. 2003/0169037 to Kang et al. ("hereinafter the Kang et al. reference"); and rejected claims 25-31 under 35 U.S.C. §103(a) as being unpatentable over the Fedeli et al. reference, the Glowacki et al. reference and the Kang et al. reference and in further view of U.S. Patent No. 6,411,086 to Choi et al. ("the Choi et al. reference").

B. Applicant Initiated Interview Summary

On June 1, 2006, an applicant initiated interview was conducted. Applicants appreciate the courtesies extended to applicants' representative by Examiner Edward Lefkowitz and Examiner David Schindler during the June 1, 2006 personal interview. As required by 37 C.F.R. § 1.133(b), applicant's summary of that interview is as follows:

1. Brief Description of any Exhibit Shown

No exhibit was shown or demonstrated during the June 1, 2006 interview.

2. Identification of the Claims Discussed

The Examiners and applicants' representative discussed independent claim 1 and dependent claims 20, 28 and 31.

3. Identification of the Specific Prior Art Discussed

The Examiner and applicants' representative discussed the Kang et al. reference.

4. Identification of the Proposed Amendments

Proposed amendments to claims 1 and 17-31, corresponding to the amendments set forth in the above-listing of the claims were proposed to the Examiners during the June 1, 2006 personal interview.

5. Summary of the Arguments Presented to the Examiner

With regard to all the rejections of the claims over applied references, applicants submitted that a Terminal Disclaimer disclaiming the terminal part of the statutory term of any patent on this instant application that would extend beyond the expiration date of the full statutory term of the Kang et al. reference would be filed.

With regard to the rejection of the claims under 35 U.S.C. §112, second paragraph, applicants presented the proposed amendments to claims 1 and 17-31. In response, Examiner

Reply dated June 28, 2006 Reply to Office Action Made Final of March 30, 2006

Schindler asserted that the proposed amendments to claims 1 and 17-31 changed the scope of the claims requiring further search and/or consideration. In response, applicants submitted that the proposed claims place the claims in better form and are made to overcome the rejection of the claims under 35 U.S.C. §112, first paragraph. Upon further consideration of the amendments to claim 1, Examiner Schindler agreed that the amendments to claim 1, as set forth in the above listing of the claims, more clearly recite and rearrange the features previously filed in claim 1 and overcome the rejection of claims 1 and 17-31 under 35 U.S.C. § 112, first and second paragraphs.

6. General Indication of Other Pertinent Matters Discussed

During the personal interview, Examiner Schindler suggested amending claim 20 to more particularly define respective orientations of planes along which the excitation coil portions and the pick-coil portions wind. As set forth in the above listing of the claims, applicants amended claim 20 to recite "along a plane substantially perpendicular to the dielectric substrate," responsive to the Examiner's suggestion.

Examiner Schindler also requested that, in the filed response, applicants identify portions of the originally filed specification that provide support for the features recited in claims 28 and 31, as set forth in the above listing of the claims. Applicants submit that support for the amendments to claims 28 and 31 may be respectively found at least in paragraphs [0026] and [0033] of applicants' originally filed specification.

7. General Outcome of the Interview

Examiner Schindler agreed that the proposed amendment to claim 1 overcomes the rejection of claims 1 and 17-31 under 35 U.S.C. § 112, first paragraph.

C. Asserted Rejection of Claims 1 and 17-31 under 35 U.S.C. § 112, First Paragraph

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 17-31 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The following language of claim 1 was identified as forming the basis of the rejection:

"the printed circuit board includes a single dielectric core and the first excitation coil, the first pick-up coil, and the first soft magnetic core are disposed on a first side of the printed circuit board and the second excitation coil, the second pick-up coil, and the second soft magnetic core are disposed on a second side of the printed circuit board."

Claim 1 has been amended as set forth in the above listing of claims to recite:

"the first soft magnetic core is disposed on a first side of the dielectric substrate and the second soft magnetic core is disposed on a second side of the dielectric substrate."

Support for the amendment to claim 1 may be at least found in originally filed paragraph [0033] and originally filed FIG. 4E. It is respectfully requested that the rejection be withdrawn.

D. Asserted Rejection of Claims 17-31 under 35 U.S.C. § 112, Second Paragraph

In the outstanding Office Action Made Final, the Examiner rejected claims 17-31 under 35 U.S.C. § 112, second paragraph, for failing to have antecedent basis for the "the rectangular ring" feature. Specific language in claim 1 was identified as forming the basis of the rejection. Claim 1 has been amended to recite "a first rectangular ring type soft magnetic core" and "a second rectangular ring type soft magnetic core," responsive to the rejection. It is respectfully requested that the rejection be withdrawn.

E. Asserted Obviousness Rejection of Claims 1 and 17-24

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 17-24 under 35 U.S.C. §103(a) as being unpatentable over the Fedeli et al. reference, the Glowacki et al. reference and the Kang et al. reference.

On July 17, 2006, Applicants filed a Terminal Disclaimer disclaiming the terminal part of the statutory term of any patent on this instant application that would extend beyond the expiration date of the full statutory term of the Kang et al. reference, which now corresponds to U.S. Patent No. 6,753,682.

Applicants submit that the combination of the Fedeli et al. reference and the Glowacki et al. reference does not disclose or suggest the combination of features recited in independent claim 1, as well as all the features of claims 17-24, which directly or indirectly depend from claim 1. It is respectfully requested that the rejection be withdrawn.

F. Asserted Obviousness Rejection of Claims 25-31

In the outstanding Office Action Made Final, the Examiner rejected claims 25-31 under 35 U.S.C. §103(a) as being unpatentable over the Fedeli et al. reference, the Glowacki et al. reference and the Kang et al. reference, and in further view of the Choi et al. reference. The rejection is respectfully traversed for at least the following reasons.

As discussed above, the combination of the Fedeli et al. reference, the Glowacki et al. reference and the Kang et al. reference fails to disclose or suggest all the features of independent claim 1, from which claims 25-31. Applicants submit that the Choi et al. reference fails to overcome the deficiencies of the combination of the Fedeli et al. reference, the Glowacki et al. reference and the Kang et al. reference, as applied to claim 1. For at least these reasons, the combination of the Fedeli et al. reference, the Glowacki et al. reference, the Kang et al. reference

and the Choi et al. reference fails to disclose or suggest all the features of claims 25-31. It is respectfully requested that the rejection be withdrawn.

G. Amendment to Drawings

Attached hereto is a Replacement Drawing Sheet, including original FIGS. 4J and 4L and amended FIG. 4K. FIG. 4K is amended such that reference term 108 correctly points to the metal film shown therein. Entry of the Replacement Drawing Sheet is respectfully requested.

H. Entry of Amendment Requested

Entry of the amendment is respectfully requested at least because the amendments: (1) were not made earlier because the amendments are made responsive to the rejections under 35 U.S.C. §112 made in the March 30, 2006 Office action; (2) present the claims in better form for consideration in the event of an appeal; (3) do not add any new claims requiring further search and/or consideration; and (4) amplify issues previously addressed during prosecution. Therefore, the amendment does not impose an undue burden on the Examiner. It is respectfully requested that the amendment be entered.

I. Conclusion

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: August 4, 2006

Eugene M. Lee, Reg. No. 32,039

Attachments:

Replacement Drawing Sheet Copy of Terminal Disclaimer Filed on July 17, 2006

LEE & MORSE, P.C. 1101 WILSON BOULEVARD, SUITE 2000 ARLINGTON, VA 22209 703.525.0978 TEL 703.525.4265 FAX

PETITION and DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. <u>50-1645</u>.